



PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 29143-41	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 03/41108	International filing date (day/month/year) 23/12/2003	(Earliest) Priority Date (day/month/year) 09/05/2003
Applicant OLSON, Rudolph A. III		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

4



None of the figures.

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International Application No

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01D39/20 C04B35/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01D C04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3 451 842 A (F.W.A. KURZ ET AL.) 24 June 1969 (1969-06-24) column 2, line 1 - line 15 column 5, line 3 - line 17; claim 1 -----	1,2
A	US 4 040 998 A (J.NEMETH) 9 August 1977 (1977-08-09) column 1, lines 1-21; claim 1; table 1 -----	1,10,12
A	US 5 407 001 A (M.YASREBI ET AL.) 18 April 1995 (1995-04-18) column 8, line 19 - line 34; claim 1; example 1 -----	1,2
A	US 4 887 795 A (J.NEMETH ET AL.) 19 December 1989 (1989-12-19) the whole document ----- -/-	1

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

° Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

S document member of the same patent family

Date of the actual completion of the international search

30 March 2005

Date of mailing of the international search report

05/04/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 3 893 917 A (M.J.PRYOR ET AL.) 8 July 1975 (1975-07-08) cited in the application the whole document</p> <p>-----</p>	1

INTERNATIONAL SEARCH REPORT



Information on patent family members



International Application No

PCT/US 03/41108

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3451842	A	24-06-1969	BE 644811 A DE 1471296 A1 FR 1403673 A GB 1054421 A NL 6402349 A	01-07-1964 28-11-1968 25-06-1965 08-09-1964
US 4040998	A	09-08-1977	NONE	
US 5407001	A	18-04-1995	US 5464797 A	07-11-1995
US 4887795	A	19-12-1989	AU 564936 B2 AU 2191683 A BE 898566 A1 BR 8400009 A CA 1186887 A1 DE 3346007 A1 FR 2538802 A1 GB 2132603 A , B GB 2140796 A , B IT 1170085 B JP 59131557 A MX 162905 B NL 8304366 A NZ 206550 A SE 8306999 A ZA 8309161 A	03-09-1987 05-07-1984 16-04-1984 31-07-1984 14-05-1985 12-07-1984 06-07-1984 11-07-1984 05-12-1984 03-06-1987 28-07-1984 08-07-1991 01-08-1984 11-10-1985 04-07-1984 25-07-1984
US 3893917	A	08-07-1975	US 4056586 A US 3947363 A	01-11-1977 30-03-1976